IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Wadih Arap et al.

Serial No.: 10/530,168

Filed: April 4, 2005

For: COMPOSITIONS AND METHODS OF USE OF TARGETING PEPTIDES FOR DIAGNOSIS AND THERAPY OF

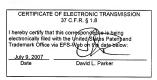
HUMAN CANCER

Group Art Unit: 1642

Examiner: Unknown

Atty. Dkt. No.: UTSC:857US

Confirmation No.: 5612



REQUEST FOR CORRECTED FILING RECEIPT

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

A corrected filing receipt is requested in view of the errors that appear in the original.

For the convenience of the Patent and Trademark Office, attached is a photocopy of the original receipt on which the errors have been noted.

There are errors in the Foreign Applications section. Please add the following to correct the priority data:

United States of America PCT/US01/27692 09/07/01

United States of America PCT/US01/28044 09/07/01

United States of America PCT/US01/27702 09/07/01.

In support of this requested correction, Applicants attach a copy of the first page of the Specification filed April 4, 2005.

No fee is believed to be due in connection with the filing of this document. However, should any fee under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to this document, the Commissioner is authorized to deduct the appropriate fee from Fulbright & Jaworski Deposit Account No.: 50-1212/UTSC:857US.

Respectfully submitted,

David L. Parker Reg. No. 32,165 Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701

(512) 474-5201

Date: July 9, 2007



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addrew COMMISSIONER FOR PATENTS P. Dec 1450 Alexandris, Viginia 22313-1450 www.upto.gov

FILING OR 371 ART UNIT FIL FEE REC'D ATTY.DOCKET NO DRAWINGS TOT CLMS IND CLMS APPL NO (c) DATE 10/530.168 02/23/2006 1642 1965 UTSC:857US 37 57 6

CONFIRMATION NO. 5612

32425 FULBRIGHT & JAWORSKI L.L.P. 600 CONGRESS AVE. SUITE 2400 AUSTIN, TX 78701

FILING RECEIPT *OC00000019697208*

Date Mailed: 07/20/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt Incorporating the requested corrections (if appropriate).

Applicant(s)

Wadih Arap, Houston, TX: Mikhail G. Kolonin, Houston, TX; Paul J Mintz, Houston, TX: Renata Pasqualini, Houston, TX; Amado J. Zurita, Houston, TX:

Power of Attorney: The patent practitioners associated with Customer Number 32425.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/US02/34987 10/30/2002

Foreign Applications

UNITED STATES OF AMERICA PCT/US02/27836 08/30/2002
UNITED STATES OF AMERICA PCT/US01/27692 09 09/07/01 UNITED STATES OF AMERICA PCT/USO1/28044 09/07/01
Projected Publication Date: 10/26/2006 UNITED STATES OF AMERICA PCT/USOI/27702

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

FULBRIGHT & JAWORSKI, LLP IPT DOCKETING Docketed V Not Reg'd Confirmation V Initials 1st

JUI 2 5 2006

09/07/01

Docket No. Action Reg'd

Foreign Aling NA

Compositions and methods of use of targeting peptides for diagnosis and therapy of human cancer

Preliminary Class

514

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process implifies the filing of patent applications on the same invention in member countries, but does not result in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pa/dod/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-4181 (1-866-999-4185).

LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37. Code of Federal Regulations. 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 134, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15 (b) cape and a realier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof

COMPOSITIONS AND METHODS OF USE OF TARGETING PEPTIDES FOR DIAGNOSIS AND THERAPY OF HUMAN CANCER

BACKGROUND OF THE INVENTION

This application is a continuation in part of PCT patent application entitled, "Compositions and Methods of Use of Targeting Peptides Against Placenta and Adipose Tissues," by Pasqualini, Arap and Kolonin, filed August 30, 2002, which was a continuation in part of PCT/US01/27692, filed on September 7, 2001. This application is also a continuation in part of PCT/US01/28044, filed on September 7, 2001 and of PCT/US01/2702, filed on September 7, 2001. The entire texts of all the above-cited applications are incorporated herein by reference. This invention was made with U.S. government support under grants grants CA90270, 1R1CA90810-01 and 1R01CA82976-01 from the National Institutes of Health. The U.S. government has certain rights in this invention.

Field of the Invention

The present invention concerns the fields of cancer diagnostics and targeted delivery of therapeutic agents to cancer cells. More specifically, the present invention relates to compositions and methods for identification and use of peptides that selectively target cancer cell receptors, such as the IL-11 receptor and/or the GRP78 receptor. In particular embodiments, the targeted receptors are preferentially expressed in prostate cancer, especially in metastatic prostate cancer. In certain embodiments, the invention concerns compositions and methods of use of novel phage-based gene delivery vectors.

Description of Related Art

Therapeutic treatment of many disease states is limited by the systemic toxicity of the therapeutic agents used. Cancer therapeutic agents in particular exhibit a very low therapeutic index, with rapidly growing normal tissues such as skin and bone marrow affected at concentrations of agent that are not much higher than the concentrations used to kill tumor cells. Treatment of cancer and other organ, tissue or